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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,898	09/10/2003	Philip A. Chou	MS1-845USC1	5166
22801	7590	10/11/2007		
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER VU, NGOC K	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 10/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/658,898

Applicant(s)

CHOU, PHILIP A.

Examiner

Ngoc K. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/2003</u> . | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 9/10/2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document (particularly, document number **0695094** having publication date **1/31/96**); each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 19-29 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,637,031. Although the conflicting claims are not identical, they are not patentably distinct from each other because: patent claims 1, 5, 8, 12, 14 and 16 include the additional limitations of the lower quality data stream or initial portion having been encoded at a bit rate below or less than a transmission

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rate, the higher quality data stream or subsequent portion having been encoded at a bit rate that equals the transmission rate; presenting the initial portion and the subsequent portion of the multimedia content at the real-time playback rate; and transmission of the initial portion of the encoded bit stream stops and transmission of the subsequent portion begins when the buffer of the client contains enough data to prevent underflow or overflow while presenting the subsequent portion of the encoded bit stream. Therefore, application claims 19-29 are broader than patent claims 1-18 and are therefore obvious over patent claims 1-18.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 19-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagasaki et al. (US 6,414,991 B1) in view of Eyer et al. (US 6,588,015 A).

Regarding claim 19, Yagasaki teaches a method for streaming time-varying multimedia content, the method comprising: constructing an encoded bit stream for the content, the encoded bit stream having an initial portion represented with a low resolution encoding (base layer) and a subsequent portion represented with an encoding having a higher resolution (enhancement layer) than the low resolution encoding. (col. 12, lines 31-33, 44-46 and 53-55). Yagasaki does not teach transmitting the encoded bit stream to a client buffer so that the client buffer receives the stream faster than removing the stream from the client buffer during real-time playback of the content; wherein transmitting the stream faster than a real time playback rate reduces the latency due to buffering to near zero. However, Eyer teaches transmitting

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multimedia data at a data rate which is greater than a play rate of the received multimedia data temporarily stored in a buffer. See col. 2, lines 12-19, 21-23, 36-39; col. 4, lines 1-3. One skilled in the art would have realized that transmitting the multimedia data must be faster than a real-time playback rate in order to provide viewers the multimedia content for viewing smoothly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yagasaki by transmitting multimedia data faster than a real-time playback rate in order to present the multimedia content to viewers for viewing smoothly.

Regarding claim 20, Yagasaki teaches that the encoded bit stream is performed by an encoder (23, 25) having a buffer that starts out non-empty (see figures 5, 11 and 12).

Regarding claim 21, Yagasaki teaches reducing a number of enhancement layers in an embedded bit stream to produce the initial portion of the content (base layer) (see col. 10, lines 14-22).

Regarding claim 22, Yagasaki teaches splicing together one or more low resolution encodings for the initial portion of the content with a higher resolution encoding for the subsequent portion of the content (see col. 12, lines 53-55).

Regarding claim 23, Yagasaki teaches a computer system for receiving and playing back multimedia content, the computerized system comprising: a buffer (201, 203); a processor (202); a memory (206) operatively coupled to the processor; and an application executed in the processor from the memory which enables the system to receive multimedia data over a network wherein the multimedia data is received as an encoded bit stream having an initial portion (base layer) and a subsequent portion (enhancement layer) (see col. 12, lines 53-55; col. 18, line 58 to col. 19, line 28; col. 37, lines 39-61; col. 9, lines 5-12). Yagasaki does not teach transmitting the encoded bit stream to the buffer so that the buffer receives the stream faster than removing the stream from the buffer during real-time playback of the content;

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wherein transmitting the stream faster than a real time playback rate reduces the latency due to buffering to near zero. However, Eyer teaches transmitting multimedia data at a data rate which is greater than a play rate of the received multimedia data temporarily stored in a buffer. See col. 2, lines 12-19, 21-23, 36-39; col. 4, lines 1-3. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yagasaki by transmitting multimedia data faster than a real-time playback rate in order to present the multimedia content to viewers for viewing smoothly.

Regarding claim 24, Yagasaki teaches a computer readable medium having instructions stored thereon for causing a computer (program or software which is executed by CPU) to perform a method for streaming time-varying multimedia content, the method comprising: constructing an encoded bit stream for the content, the encoded bit stream having an initial portion represented with a low resolution encoding (base layer) and a subsequent portion represented with an encoding having a higher resolution (enhancement layer) than the low resolution encoding (col. 12, lines 31-33, 44-46 and 53-55; col. 37, lines 39-47). Yagasaki does not teach transmitting the encoded bit stream to a client buffer so that the client buffer receives the stream faster than removing the stream from the client buffer during real-time playback of the content to permit beginning playback of the stream without significant buffering.

However, Eyer teaches transmitting multimedia data at a data rate which is greater than a play rate of the received multimedia data temporarily stored in a buffer. See col. 2, lines 12-19, 21-23, 36-39; col. 4, lines 1-3. One skilled in the art would have realized that transmitting the multimedia data must be faster than a real-time playback rate in order to provide viewers the multimedia content for viewing smoothly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Yagasaki by transmitting

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multimedia data faster than a real-time playback rate in order to present the multimedia content to viewers for viewing smoothly.

Claims 25-27 recite similar limitations of claims 20-22. Therefore, claims 25-27 are rejected for the same reasons as addressed in claims 20-22.

Claims 28-29 recites similar limitations of claims 23-24. Therefore, claims 28-29 are rejected for the same reasons as addressed in claims 23-24.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nishikawa (US 6,032,180 A) teaches forwarding image data to client buffer for temporally storing and displaying image data. Chujoh et al. (US 6,104,754 A) teaches moving picture coding and decoding system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ngoc Vu/
NGOC K. VU
PRIMARY EXAMINER
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September 12, 2007